

Remarks

Claims 1, 3-15, 17, 18 and 21 are pending in this application. Claims 2, 16, 19 and 22 have been canceled.

Rejection of claims 1, 3-17, 20 and 21 under 35 USC §112, first paragraph

Claims 1, 3-17, 20 and 21 have been rejected under this heading for containing new matter that is not described in the specification, specifically, for the inclusion of the limitation in claim 1 to recite "wherein phenotyping is carried out by the reduction or elimination of compensating differential expression of by the labeling of at least one compensating differentially regulated gene." Applicants traverse this rejection for the following reason.

The above recitation may be found, for example, in originally filed claim 2 and page 5, lines 29-36 of the instant specification. No new matter has been made by the amendment made to claim 1 and dependent claims therefrom. Accordingly, withdrawal of this rejection is respectfully requested.

Rejection of claims 1, 3-17, 20 and 21 under 35 USC §112, second paragraph

Claims 1, 3-17, 20 and 21 have been rejected under this section for being indefinite for failing to point out and distinctly claiming the subject matter Applicants regard as their invention. Applicants traverse this rejection for the following reasons.

Amended claim 1, step c recites "wherein phenotyping is carried out by the reduction or elimination of compensating differential expression which is perceptible from the outside of said organism". On page 6 of the Office Action, the Examiner states that this definition is contrary to the art-accepted use of the term "phenotyping". However, this definition falls within the art recognized definition of "phenotype" cited in the American Heritage Dictionary, item 1, disclosed in the Office Action on page 5.

Support for amended claim 1 may be found, for example, on page 1, lines 33-38, disclose that any alteration (shape, size, growth, rate of cell division, etc) perceptible from the outside of the genetically modified organism as compared to the unmodified organism is referred to as a modified phenotype and phenotyping refers to causing such a modification.

Applicants submit that the specification provides support to the limitation of claim 1 and dependent claims therefrom. Applicants further submit that the definition of "phenotype" as disclosed in the specification and recited in the claims is art recognized. Accordingly, this rejection has been overcome and notice to that effect is respectfully requested.

Rejections under 35 USC 102(b)

Claims 1, 3-6, 8, 10, 16 and 17 remain rejected under 35 USC 102(b) as being anticipated by Suzuki et al. Applicants traverse the rejection.

Applicants have amended claim 1 and dependent claims therefrom such that "the labeling of at least one compensating differentially regulated gene" has been removed from the claimed method. Applicants submit that in light of the instant amendment, Suzuki et al does not anticipate the claimed invention and that this rejection has been overcome.

Claims 1, 3-8, 11-14, 17 and 18 remain rejected under 35 USC 102(b) as being anticipated by Rohlmann et al as evidenced by Ishibashi et al. Applicants traverse this rejection.

Applicants have amended claim 1 and 17 and dependent claims therefrom to more particular point out and clarify the subject matter that Applicants claim as their invention. The recitation of "phenotyping the organism" now clearly states that its measurement is external and visible by the amendment perceptible from the outside of said organism". Support for this amendment may be found, for example, on page 1, lines 26 and 33.

As such, it is submitted that Rohlmann does not anticipate the claimed invention. Withdrawal of this rejection is respectfully requested.

Claims 1, 3, 5-9, 15, 17, and 19-21 remain rejected under 35 USC 102(b) as being anticipated by Tugendreich et al. The rejection is traversed for the following reason.

To more clearly distinguish the claimed invention over Tugendreich et al, Applicants have amended the claims to recite that the heterologous expression of at least one protein or protein fragment by genetic modification does not produce a detectable change in the phenotype of the organism as it is perceived from the outside. Support for this amendment may be found, for example, on page 2, lines 11-17 and line 38 through line 4 on page 3 of the instant specification. Tugendreich et al discloses a detectable phenotype by overexpressing p38, namely growth inhibition.

In light of the above, Applicants submit that this rejection has been overcome and notice to that effect is respectfully requested.

Rejections under 35 USC 103

Claims 20 and 21 remain rejected under 35 USC 103 as being unpatentable over Rohlmann et al in view of Capecchi. Applicants traverse this rejection.

Applicants amended claim 1 and dependent claims 20 and 21. The cited prior art does not teach or suggest a the claimed method for identifying a substance or drug wherein the heterologous expression of a protein which does not cause a detectable change in the phenotype being perceived from the outside of the modified organism is detectable by just the reduction or elimination of compensating differential expression. The specification supports this outcome, see, for example, the Tables and Figure 1.

Accordingly, it is submitted that this rejection has been overcome. Applicants submit that withdrawal of this rejection is now in order.

Should the Examiner believe that an interview would advance the prosecution of this application, the Applicants invite him to contact the undersigned at 908.231.4658.

Respectfully submitted,



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